

LVIII.—*On the Hymenoptera collected by Mr. W. L. Distant in the Transvaal, South Africa, with Descriptions of supposed new Species.* By Lieut.-Colonel C. T. BINGHAM.

Tribe FOSSORES.

Family Mutillidæ.

Genus APTEROGYNA, Latr.

Apterogyna globularia, Fabr.

Scolia globularia, Fabr. Ent. Syst. ii. (1793) p. 237.

Apterogyna globularia, Dalman, Anal. Ent. 1823, p. 101, pl. iv. figs. 1-7; Smith, Cat. Hym. B. M. iii. p. 63; Radoszk. Horæ Soc. Ent. Ross. xix. (1885) p. 43, pl. ix. fig. 66.

Apterogyna Ehrenbergii, Westw. Griff. An. Kingd. xv. (1832) p. 515, ♂, pl. lxxvi. fig. 5.

A solitary male, Pretoria (*Zutrzenka*).

Genus MUTILLA, Linn.

Mutilla sycorax, Smith.

Mutilla sycorax, Smith, Cat. Hym. B. M. iii. p. 19, ♀; Sich. & Rad. Hor. Soc. Ent. Ross. vi. (1869) p. 232, pl. viii. fig. 4.

Three females, Barberton (*Rendall*) and Pienaars River (*W. L. Distant*), agreeing in all particulars with Smith's types in the British Museum.

Mutilla comparata, Smith.

Mutilla comparata, Smith, Desc. New Spec. Hym. B. M. 1879, p. 161, ♀.

Two females, Pretoria (*Distant*), and two females, Brak Kloof, near Grahamstown (*Mrs. White*); one female, Waterval-ouder, one male, Durban (*A. Ross*).

Mutilla mephitis, Smith.

Mutilla mephitis, Smith, Cat. Hym. B. M. iii. (1855) p. 21, ♀; Sich. & Radoszk. Hor. Soc. Ent. Ross. vi. (1869) p. 256, pl. ix. fig. 3; Sauss. Mitth. schweiz. ent. Ges. viii. pt. 7 (1891) p. 256; Grib. Mem. Accad. Sci. Bolog. (5) iv. (1894) p. 51.

Mutilla coryphasia, Pering. Ann. S. Afr. Mus. i. (1899) pp. 367 & 439, ♂.

Mr. Peringue says that he has received his *Mutilla coryphasia* in coitu with *M. mephitis*, Smith. In Mr. Distant's collection there is a male *Mutilla* from Pretoria (*Distant*) agreeing exactly with the description of *M. coryphasia*; also

there are, collected by Mr. Rendall, six females of undoubted *M. mephitis*, Smith, from Fort Johnston, Nyasaland, with two males from the same locality which I should have unhesitatingly ascribed to *M. mephitis*. These two males closely resemble *M. coryphasia*, but have, in addition to the bands of white pubescence on the second and third abdominal segments, a narrow band of like pubescence on the apex of the first segment, lateral white spots midway on the middle of the second, and a medial round white spot on the apices of the fifth and sixth segments. These latter markings approximate so closely to the disposition of the markings in the female that provisionally I consider these to be the true males of *M. mephitis*, but follow Mr. Peringue in joining *M. coryphasia* to *M. mephitis*.

Mutilla leucopyga, Klug.

Mutilla leucopyga, Klug, Symb. Physic., Ins. (1829) n. 10, ♀, pl. iv. fig. 10; Sich. & Radoszk. Hor. Soc. Ent. Ross. vi. (1869) p. 231, ♀.

One female, Fort Johnston, Nyasaland (*Rendall*); one female, Durban (*A. Ross*).

Mutilla tettensis, Gerst.

Mutilla tettensis, Gerst. Monatsber. Akad. Wiss. Berl. 1857, p. 511, ♀; id. Peters, Reise n. Mossamb., Zool. v. p. 488, pl. xxxi. fig. 7, ♀.

One female, Fort Johnston, Nyasaland (*Rendall*).

Mutilla guineensis, Fabr.

Mutilla guineensis, Fabr. Ent. Syst. ii. 1793, p. 367, ♀; Gerst. Monatsber. Akad. Wiss. Berlin, 1857, p. 511, ♂; id. Peters, Reise n. Mossamb., Zool. v. 1862, p. 486, pl. xxxi. figs. 4 & 5; Sich. & Radoszk. Hor. Soc. Ent. Ross. vi. (1869) p. 225; Magr. Ann. Mus. Civ. Gen. xxxv. (1895) p. 164.

One female, Fort Johnston, Nyasaland (*Rendall*).

Mutilla cloantha, Peringue.

Mutilla cloantha, Pering. Ann. S. Afr. Mus. i. (1899) p. 353, ♀, & p. 355, ♂.

One male, Pretoria (*Distant*).

Mutilla excavata, sp. n.

♂. Black, with the apical margin of the first narrowly and the whole of the second abdominal segment bright red; pubescence fuscous brown, mixed with white, fairly dense on the head, sparse on the thorax and abdomen; the

apical margins of the second and third abdominal segments ciliated with yellow hairs. Head transverse, about twice as broad as long; cheeks well developed, but narrow; occiput transverse; eyes oval, emarginate internally; antennæ stout, densely pubescent, the hollow below the base of the antennæ and the front remarkably deep; mandibles narrow; the whole head closely and very coarsely punctured. Thorax about as broad as the head, closely, coarsely, but shallowly punctured; the pro- and mesonotum rounded, in front the latter with three longitudinal carinæ; scutellum laterally compressed, gibbous, rounded posteriorly, divided from the mesonotum by a remarkably broad and deep but short transverse sulca; postscutellum and median segment much depressed below the scutellum, the median segment convexly rounded and covered with large shallow foveæ; legs densely pubescent; wings fuscous, with three cubital cells; tegulæ remarkably broad. Abdomen fusiform, broadest towards the apex of the second segment, finely punctured, shining, pygidial area foveate; the carina on the first ventral segment narrow, laminate, ending in a raised blunt point posteriorly; ventral surface of the second segment with a remarkable broad bilobed excavation, smooth inside and bounded by a punctured margin.

Length 13; exp. 25 millim.

Hub. South Africa, Rustenburg (*Distant*).

Mutilla charaxus, Smith.

Mutilla charaxus, Smith, Cat. Hym. B. M. iii. (1855) p. 17, ♂; Sich. & Radoszk. Hor. Soc. Ent. Ross. vi. (1869) p. 282, ♂.

One male, Fort Johnston, Nyasaland (*Rendall*).

Mutilla acheron, Smith.

Mutilla acheron, Smith, Cat. Hym. B. M. iii. (1855) p. 18, ♂; Sich. & Radoszk. Hor. Soc. Ent. Ross. vi. (1869) p. 296, ♂.

One male, Rustenburg (*Distant*).

Mutilla atropos, Smith.

Mutilla atropos, Smith, Cat. Hym. B. M. iii. (1855) p. 22, ♂.

? *Mutilla albistyla*, Sauss. Dist. Nat. Transvaal, 1892, p. 225, ♂, pl. iv. fig. 7.

Mutilla artemisia, Perin. Ann. S. Afr. Mus. i. (1899) p. 368, ♂.

Six males, Fort Johnston, Nyasaland (*Rendall*).

It is somewhat doubtful whether *M. albistyla*, Sauss., is really identical with Smith's insect. It is much smaller and the white transverse band on the abdomen is different.

Mutilla medon, Smith.

Mutilla medon, Smith, Cat. Hym. B. M. iii. (1855) p. 20, ♂ ; Sich. & Radoszk. Hor. Soc. Ent. Ross. vi. (1869) p. 239, pl. xxi. fig. 12, ♂.

Three males, Fort Johnston, Nyasaland (*Rendall*).

Family *Scoliidae*.Genus *MYZINE*, Latr.*Myzine Guerini*, Lucas.

Myzine Guerini, Lucas, Explor. sc. Alg., Zool. iii. (1846) p. 282, pl. xv. fig. 5, ♂.

Four males, Pretoria (*Distant*).

Myzine ruficeps, Smith.

Myzine ruficeps, Smith, Cat. Hym. Ins. B. M. iii. (1855) p. 75, ♀.

One typical female, Durban (*A. Ross*).

Genus *TIPHIA*, Fabr.*Tiphia natalensis*, Smith.

Tiphia natalensis, Smith, Descr. New Spec. Hym. B. M. p. 184, ♀.

One male, Pretoria (*Distant*).

Smith described the female. The male closely resembles the female, but is smaller and more pubescent. Head, the great part of the thorax, and the abdomen finely and closely punctured; the pronotum very large, broad, and unpunctured, smooth and shining on its posterior half; mesonotum with a few scattered punctures, smooth and shining; median segment with three smooth, shining, longitudinal carinae; abdomen with fairly dense, hoary white, fine, erect, pubescence, the basal segment petiolate, nodose at apex, the node above depressed and with a preapical transverse groove; legs pubescent; wings slightly flavo-hyaline.

Length 9.5 millim.

Genus *SCOLIA*, Fabr.(a) *With two cubital cells.*Subgenus *DISCOLIA*, Sauss.*Scolia ruficornis*, Fabr.

Scolia ruficornis, Fabr. Ent. Syst. ii. (1793) p. 230, ♂ ; Guér. Voy. Coq.,

Zool. ii. (1830) p. 254 ; Lepel. Hist. Nat. Ins., Hym. ii. (1845) p. 524 : Gerv. v. d. Deck. Reise in Ost-Afr. (1873) p. 334, ♀ ♂.

Scolia (Discolia) ruficornis, Sauss. & Sich. Cat. Spec. Gen. Scol. 1864, p. 85, ♀ ♂.

One female, Fort Johnston, Nyasaland (*Rendall*).

Scolia melanaria, Burm.

Scolia melanaria, Burm. Abh. naturf. Ges. Halle, i. pt. 4 (1853) p. 38, ♂ ; Gerst. Peters's Reise n. Mossamb., Zool. v. (1862) p. 494, ♀ ♂.

Scolia (Discolia) melanaria, Sauss. & Sich. Cat. Spec. Gen. Scol. 1864, p. 82, ♀ ♂.

Discolia ruficornis, var. *melanaria*, Grib. Mem. Accad. Sci. Bolog. (3) iv. (1896) p. 47.

Ten females, one male, Pretoria and Durban (*Distant*) ; Fort Johnston, Nyasaland (*Rendall*) ; Durban (*A. Ross*).

Scolia erythropyga, Burm.

Scolia erythropyga, Burm. Abh. naturf. Ges. Halle, i. pt. 4 (1853) p. 33, ♀.

Scolia (Discolia) erythropyga, Sauss. & Sich. Cat. Spec. Gen. Scol. 1864, p. 95, ♀ ♂.

Nine females, eighteen males, Pretoria (*Distant*) ; Waterval-onder, Barberton (*Rendall*) ; Zomba (*Rendall*).

There is considerable variation in size, among the males especially, less so among the females.

Scolia ebenina, Sauss.

Scolia ebenina, Sauss. Ann. Soc. Ent. Fr. (3) vi. (1858) p. 200, ♀.

Scolia (Discolia) ebenina, Sauss. & Sich. Cat. Spec. Gen. Scol. 1864, p. 80, ♀.

Two females, three males, Pretoria (*Distant*) ; Fort Johnston, Nyasaland (*Rendall*).

The male closely resembles the female, but has the head much smaller and rounder, with smaller mandibles, the clypeus convex and comparatively large, legs more slender, and the abdomen less pubescent.

Scolia alaris, Sauss.

Scolia alaris, Sauss. Ann. Soc. Ent. Fr. (3) vi. (1858) p. 203, ♀ ♂.

Scolia (Discolia) alaris, Sauss. & Sich. Cat. Spec. Gen. Scol. 1864, pp. 97 & 282, ♀ ♂.

Nine males, Pretoria (*Distant*) ; Waterberg ; Fort Johnston, Nyasaland (*Rendall*) ; Durban (*A. Ross*).

M. Saussure (*loc. cit.*) is inclined to think that *Scolia alaris* and *Elis fasciatipennis*, Smith, may be the same insect ; but though, at first sight, the colour of the wings of the two

insects may appear similar, a careful examination will show how really different they are in tint.

Scolia chrysotricha, Burm.

Scolia chrysotricha, Burm. Abh. naturf. Ges. Halle, i. pt. 4 (1853) p. 32, ♀.

Scolia (Discolia) chrysotricha, Sauss. & Sich. Cat. Spec. Gen. Scol. 1864, p. 99, ♀ ♂.

Discolia chrysotricha, Grib. Bull. Soc. Ent. Ital. xxv. (1893) p. 176, ♀ ♂.

One female, five males, Barberton (*Rendall*) ; Masil Nek (*Distant*).

Scolia abyssinica, Sauss.

Scolia abyssinica, Sauss. Ann. Soc. Ent. Fr. (3) vi. (1858) p. 203, ♀.

Scolia (Discolia) abyssinica, Sauss. & Sich. Cat. Spec. Gen. Scol. 1864, p. 87, ♀ ♂.

Twelve males, Johannesburg ; Brak Kloof, near Grahams-town (*Mrs. White*) ; Fort Johnston, Nyasaland (*Rendall*).

Scolia cyanea, Lepel.

Scolia cyanea, Lepel. Hist. Nat. Ins., Hym. iii. (1845) p. 525, ♂ ; Burm. Abh. naturf. Ges. Halle, i. pt. 4 (1853), p. 38, ♀ ♂ ; Gerst.

Peters's Reise n. Mossamb., Zool. v. (1862) p. 494, ♀ ♂.

Scolia (Discolia) cyanea, Sauss. & Sich. Cat. Spec. Gen. Scol. 1864, p. 81, ♀ ♂.

Four females, thirteen males ; Pretoria (*Distant*) ; Zoutpansberg (*Kessner*).

Scolia dispar, Klug.

Scolia dispar, Klug, Symb. Physic. Dec. 3rd, 1832, Ins. t. xxvi. fig. 1, ♀, fig. 2, ♂ ; Burm. Abh. naturf. Ges. Halle, i. pt. 4 (1853), p. 34, ♀ ♂.

Scolia (Discolia) dispar, Sauss. & Sich. Cat. Spec. Gen. Scol. 1864, p. 76, ♀ ♂.

Two females, Fort Johnston, Nyasaland (*Rendall*).

Scolia interstincta, Klug.

Scolia unifasciata, Fabr. (nec Cyrillo, 1787) Ent. Syst. ii. (1793) p. 233, ♂.

Scolia interstincta, Klug, Beitr. z. Naturk. i. (1810) p. 36, ♂ ; id. Symb. Physic. Dec. 3rd, 1832, t. xxvi. fig. 13, ♂.

Scolia lucosa, Klug, Walth, Reise d. Tirol &c. 1835, P. 2, p. 88.

Scolia (Discolia) interstincta, Sauss. & Sich. Cat. Spec. Gen. Scol. 1864, p. 66.

One female, Brak Kloof, near Grahamstown (*Mrs. White*).

Scolia bipennis, Sauss.*Lacosi bipennis*, Sauss. Stett. ent. Zeit. xx. (1859) p. 177, ♂.*Scolia (Discolia) bipennis*, Sauss. & Sich. Cat. Spec. Gen. Scol. 1864, p. 98, ♂.One male, Pretoria (*Distant*).*Scolia præcana*, Sauss.*Discolia præcana*, Sauss. Dist. Nat. in the Transvaal, 1892, p. 222, ♂.Five males, Durban (*A. Ross*).

Genus ELIS, Fabr.

(a) *With three cubital cells in the fore wing.*

Subgenus TRIELIS, Sauss. & Sich.

Elis quinquecincta, Fabr.*Scolia quinquecincta*, Fabr. Syst. Piez. 1804, p. 243; v. d. Lind. Nouv.

Mém. Ac. Bruxelles, vi. (1827) p. 293; Burm. Abh. naturf. Ges.

Halle, i. P. 4 (1853) p. 179, ♂.

Elis (Trielis) villosa, Sauss. & Sich. Cat. Spec. Gen. Scol. 1864, p. 154.Two males indistinguishable from European specimens,
Fort Johnston, Nyasaland (*Rendall*).*Elis pardalina*, Gerst.*Scolia pardalina*, Gerst. Monatsber. Akad. Wiss. Berl. (1857) p. 512, ♂;id. Peters's Reise n. Mossamb., Zool. v. (1862) p. 495, ♂, t. xxxi.
fig. 11.*Elis (Trielis) pardalina*, Sauss. & Sich. Cat. Spec. Gen. Scol. 1864,
p. 148, ♂.

One male.

(b) *With two cubital cells in the fore wing.*

Subgenus DIE LIS, Sauss. & Sich.

Elis fasciatipennis, Smith.*Scolia fasciatipennis*, Smith, Cat. Hym. B. M. iii. (1855) p. 103, ♀ ♂.*Elis (Dielis) fasciatipennis*, Sauss. & Sich. Cat. Spec. Gen. Scol. 1864,
p. 169, ♀ ♂; Kirby, Trans. Ent. Soc. Lond. 1889, p. 448, ♀ ♂.One female, Fort Johnston, Nyasaland (*Rendall*).*Elis albicollis*, Christ.*Sphex albicollis*, Christ, Naturg. d. Insect. 1791, p. 260, pl. xxvi. fig. I.*Scolia thoracica*, Klug, Mag. Ges. naturf. Fr. Berlin, ii. (1807) p. 48.*Campsomeris aureicollis*, Lep. Hist. Nat. Ins., Hym. iii. (1845)
p. 499, ♀.

Scolia eriophora, Klug, Symb. Physic. 1832, pl. xxvii. fig. 5, ♂.

Colpa ferruginea, Lep. Hist. Nat. Ins., Hym. iii. (1845) p. 542, ♂.

Elis (Dielis) coelebs, Sauss. & Sich. Cat. Spec. Gen. Hym. 1864, p. 184, ♀.

Sixteen females, nine males?, Fort Johnston, Nyasaland (*Rendall*); Pretoria (*Distant*); Waterberg (*Wildes*); Durban (*A. Ross*).

A species protean in its variations and of which the male is not known for certain. I have followed Dalla Torre in considering as the male the insect figured by Klug under the name *eriophora* in the 'Symbolæ Physicæ.'

Elis clotho, Sauss.

Elis (Campsomeris) clotho, Sauss. Stett. ent. Zeit. xx. (1859) p. 263, ♀.

Elis (Dielis) clotho, Sauss. & Sich. Cat. Spec. Gen. Scol. 1864, p. 182, ♀.

Two females, Durban (*Distant*); Zomba (*Rendall*); ? three males, Durban (*A. Ross*).

The male assigned to this species resembles the male of *Elis collaris*, Fabr., with which species the female *E. clotho* has close affinities.

Elis collaris, Fabr.

Tephia collaris, Fabr. Syst. Ent. 1775, p. 354.

Scolia thoracica, Fabr. Mant. Ins. i. (1787) p. 281.

Scolia senilis, Fabr. Ent. Syst. ii. (1793) p. 237.

Scolia vestita et *S. discolor*, Klug, Symb. Physic. 1832, pl. xxvii. figs. 6 & 7, ♀.

Campsomeris ruficollis, Lep. Hist. Nat. Ins., Hym. iii. (1845) p. 500, ♀.

Colpa senilis et *C. canescens*, Lep. l. c. pp. 537 & 538, ♂.

Elis (Dielis) collaris, Sauss. & Sich. Cat. Spec. Gen. Scol. 1864, p. 163, ♀ ♂.

Six females and seven males (typical), Pretoria (*Distant*); Figtree Creek, near Barberton (*Rendall*); Lydenburg Distr. (*Zutrzenka*); Zomba (*Rendall*); Brak Kloof, near Grahams-town (*Mrs. White*); Durban (*A. Ross*).

Elis aureola, Klug.

Scolia aureola, Klug, Symb. Physic. 1832, pl. xxvii. fig. 11, ♀.

Colpa dimidiata, Lepel. Hist. Nat. Ins., Hym. iii. (1845) p. 549, ♀.

Elis (Dielis) aureola, Sauss. & Sich. Cat. Spec. Gen. Scol. 1864, p. 173, ♀.

Three females, Durban (*Distant*); Fort Johnston, Nyasaland (*Rendall*).

Elis crinita, Sauss.

Elis crinita, Sauss. Mém. Soc. Phys. et Hist. Nat. Genève, xiv. (1854) p. 65, pl. iv. fig. 14, ♂.

Elis (Dielis) crinita, Sauss. & Sich. Cat. Spec. Gen. Scol. 1864, p. 166, ♂.

One female, Fort Johnston, Nyasaland (*Rendall*); one male, Durban (*Distant*).

Elis fasciatella, Klug.*Scolia fasciatella*, Klug, Symb. Physic. 1832, pl. xv. figs. 6 & 7, ♀ ♂.*Elis (Dielis) fasciatella*, Sauss. & Sich. Cat. Spec. Gen. Scol. 1834, p. 170, ♀ ♂.One male, Fort Johnston, Nyasaland (*Rendall*); three males, Durban (*A. Ross*).*Elis undulata*, Smith.*Scolia undulata*, Smith, Cat. Hym. Ins. B. M. iii. (1855) p. 104, ♀.*Elis (Dielis) undulata*, Sauss. & Sich. Cat. Spec. Gen. Scol. 1864, p. 88, ♀ ♂.A single male, Durban (*A. Ross*).Family **Pompilidæ**.Genus **POMPILUS**, Fabr. (sens. lat. apud Kohl).*Pompilus capensis*, Dhlb.*Pompilus capensis*, Dhlb. Hym. Eur. i. (1843) p. 49, ♀; Smith, Cat. Hym. B. M. iii. (1855) p. 133.Two males, Fort Johnston, Nyasaland (*Rendall*); Delagoa Bay (*Distant*).*Pompilus frustratus*, Smith.*Pompilus frustratus*, Smith, Descr. New Sp. Hym. 1879, p. 145, ♀.Three females, Barberton (*Rendall*); Pretoria (*Distant*).

The specimen from Barberton differs from the type in the British Museum in being smaller and having the antennæ ferruginous yellow instead of black.

Pompilus diversus, Dhlb.*Pompilus diversus*, Dhlb. Hym. Eur. i. (1845) p. 446.Three females, Fort Johnston, Nyasaland (*Rendall*); Pretoria (*Distant*).*Pompilus insidiosus*, Smith.*Pompilus insidiosus*, Smith, Descr. New Sp. Hym. 1879, p. 143, ♀.One male, two females, Fort Johnston, Nyasaland (*Rendall*).*Pompilus pilosus*, Smith.*Pompilus pilosus*, Smith, Descr. New Sp. Hym. 1879, p. 140, ♀.Two typical females, Fort Johnston, Nyasaland (*Rendall*).

Pompilus tibialis, Klug.

Pompilus tibialis, Klug, Symb. Physic. 1834, pl. xxxix. fig. 6; Dhlb. Hym. Eur. i. (1845) p. 445; Radoszk. Bull. Soc. Nat. Moscou, 1891, p. 574, pl. xxiii. fig. 78.

One male, Pretoria (*Distant*).

Pompilus dichrous, Brullé.

Pompilus dichrous, Brullé, Hist. Nat. Iles Canar. ii. (1840) p. 92, pl. iii. fig. 21.

One female, Johannesburg, 27th November, 1898.

Pompilus ignitus, Smith.

Pompilus ignitus, Smith, Cat. Hym. B. M. iii. (1855) p. 142, ♀.

One female, Barberton (*Harrison*).

This species and *Salius basalis*, Smith, bear a most remarkable resemblance, but the armature of the legs separates them at once.

Pompilus vindicatus, Smith.

Pompilus vindicatus, Smith, Cat. Hym. Ins. B. M. iii. (1855) p. 142, ♀.

One female, three males, Zoutpansberg (*Kessner*) ; Fort Johnston, Nyasaland (*Rendall*) ; Zomba (*Rendall*).

Pompilus pectinipes, v. d. Linden.

Pompilus pectinipes, v. d. Linden, Nouv. Mém. Ac. Sc. Brux. iv. (1827) p. 341; Dhlb. Hym. Eur. i. (1845) p. 450, ♀ ♂; Smith, Cat. Hym. B. M. iii. (1855) p. 123, ♀ ♂; Tourn. Ent. Genev. i. pts. 11, 12 (1890) p. 208; Saunders, Hym. Acul. Brit. 1893, pp. 56 & 65, pl. ix. fig. 8.

One male, Pretoria (*Distant*).

This solitary specimen seems to me typical *pectinipes*, with the pronotum arcuate posteriorly and the apical ventral segment carinate.

Pompilus Distanti, Bingham.

Homonotus cærulans, Sauss. (nec Lepel. *Pompilus cærulans*) Dist. Nat. in the Transvaal (1892), p. 213, ♀.

Four females, Pretoria (*Distant*).

Pompilus? latipes, sp. n.

♀. Black, the tibiæ and tarsi of the anterior and the femora, tibiæ, and tarsi of the posterior legs deep fulvous yellow. The head, thorax, basal half of the median segment, and the abdomen very minutely reticulate-punctate, but with a shining gloss and devoid of pubescence; apical half of

median segment coarsely transversely strigate. Head transverse, very much broader than long, almost flat in front, the vertex above narrowed sharply, barely arched, the ocelli small and inconspicuous; mandibles short, very convex, obtusely bidentate; clypeus transverse, narrow, the anterior margin entire; antennæ moderately thick, densely pubescent, planted in deep hollows low down on the face immediately above the posterior margin of the clypeus; eyes long, narrow, reaching to the base of the mandibles, their inner margins parallel. Thorax elongate, strongly compressed, very slightly convex above, almost flat; pronotum extraordinarily long, narrowed anteriorly, the sides of the prothorax with a deep triangular depression, the apex of which is directed forwards, the lateral margins of the pronotum overhanging the depression; anterior and posterior margins of the pronotum transverse, not arched; mesonotum very short, compressed towards the apex; scutellum and postscutellum strongly compressed, together longer than the mesonotum, median segment long, rounded above and on the sides, and with a gradual rounded slope to apex, the punctures on the basal portion coarser than on the rest of the thorax; legs short, the tibiæ of the intermediate and posterior legs strongly spined; the coxæ and femora of the anterior and the coxæ only of the intermediate and posterior legs extraordinarily thick and massive; claws short, deeply bidentate at apex. Wings long and narrow, fuscous, with a purple iridescence, paling somewhat on the posterior wings: anterior wings with an elongate marginal cell, pointed at base and apex; three cubital cells, the first nearly as long as the second and third united, the second and third subequal; the second cubital cell receives the first recurrent nervure at its apical third, the third cubital cell receives the second recurrent nervure at its middle. Abdomen fusiform, narrow, slightly pubescent underneath and at apex; pygidium convex.

Length 14; exp. 28 millim.

Hab. Barberton (*Rendall*).

This remarkable insect resembles the species of the American genus *Chirodumus*, Halliday, in its flat head and immensely thick anterior femora. It will probably form the type of a new genus, but as I have seen only one specimen, I have with some doubt recorded it under the genus *Pompilus* for the present. In form and general appearance it recalls species of the *Ferreola* group.

Genus *SALIUS*, Fabr. (sensu lat. apud Kohl).

Salius capensis, Fabr.

Sphex capensis, Fabr. Spec. Ins. i. (1781) p. 449.

Pompilus capensis, Fabr. Syst. Piez. 1804, p. 196.

Hemipepsis capensis, Dhlb. Hym. Eur. i. (1843) p. 123.

Mygimimia capensis, Smith, Cat. Hym. Ins. B. M. iii. (1855) p. 186.

Twenty-two females and eight males, Pretoria (*Distant*); Barberton (*Rendall*); Johannesburg (*Cregoe*); Waterval-
onder, Durban (*A. Ross*).

Salius sericeipennis, sp. n.

♀. Resembles *S. capensis*, Fabr., but the head and thorax are considerably wider and more massive, and the wings have the apical third fuscous, with a brilliant purple iridescence.

Black, the head castaneous red; the tips of the mandibles, the parts round the base of the antennæ, the occiput, cheeks, and region of the ocelli black; a line round the orbits and the antennæ, the apex of the femora, the tibiæ and tarsi of the legs, and the basal two thirds of the wings deep golden yellow, the extreme base of the wings black. The head, thorax, legs, and abdomen covered with a dense soft sericeous pile, which in certain lights is seen to cover the wings, also giving them a brilliant silky gloss. Head broad, as broad as the thorax; the clypeus convex, widely emarginate anteriorly; the face hollow about the base of the antennæ, the vertex obliquely sloping to the front, the occiput and cheeks narrow; the eyes large, reaching to the base of the mandibles, their inner orbits slightly convergent above. Thorax broad; the pronotum broadly rounded in front, its posterior margin arched; the mesonotum flat, with three distinct longitudinal carinæ, the space between the carinæ transversely concave; scutellum and postscutellum convex, slightly laterally compressed; median segment short, cylindrical above, the apical third abruptly and rather steeply sloped, the basal two thirds very coarsely transversely striate, the apical sloping portion very smooth and shining, not striate; legs stout, the tibiæ and tarsi of the intermediate and posterior legs strongly and closely spinose; claws of the tarsi bidentate at base. Wings broad, the first recurrent nervure in the fore wing uniting with the second transverse cubital nervure; a hyaline spot at the base of the first discoidal cell. Abdomen broadly fusiform, the pygidium densely covered with stiff long black hairs.

♂. Similar, smaller; the occiput, cheeks, scutellum, and postsutellum castaneous red; the abdomen proportionately smaller.

♀. Length 35; exp. 64 millim.

♂. Length 26; exp. 52 millim.

Described from one female from Coomartie Poort (*W. E. Dawson*) and one male from Barberton (*Rendall*).

Salix basalis, Smith.

Pompilus basalis, Smith, Cat. Hym. Ins. B. M. iii. (1855) p. 138, ♀.

One female, Durban (*Distant*).

The type of this species is in the British Museum collection, and is a *Salix*, not a *Pompilus*.

Salix spectrum, Smith.

Mygminia spectrum, Smith, Cat. Hym. Ins. B. M. iii. (1855) p. 187, ♀ ♂.
Prionemis hirsutus, Sauss. Dist. Nat. Transvaal, 1892, p. 216, pl. v. fig. 3.

Four males, Pretoria (*Distant*).

Salix Tamiseri, Guér.

Pompilus Tamiserii, Guér. Lefebv. Voy. Abyss. vi. pt. 4 (1848), p. 356, pl. viii. fig. 4; Gerst. Pet. Reise n. Mossamb., Zool. v. (1862) p. 483, ♀ ♂.

Pompilus Combesii, Guér. l. c. p. 356, var.

? *Mygminia insignis*, Smith, Cat. Hym. Ins. B. M. iii. (1855) p. 188, ♀.
Mygminia depressa, Sauss. Dist. Nat. Transvaal, 1892, p. 219.

Seventeen females and twenty-three males, Barberton (*Rendall*); Pretoria (*Distant*); Johannesburg (*Cregoe*).

The insect I identify as the *Pompilus Tamiserii* of Guérin agrees exactly with Guérin's description and figure. It is a variable species in size and in the amount of yellow on the apical segments of the abdomen. *Mygminia insignis*, Smith, seems to me to be a large race of *S. Tamiseri*.

Salix antennatus, Smith.

Mygminia antennata, Smith, Cat. Hym. Ins. B. M. iii. (1855) p. 186, ♀ ♂.

Cyphonomyx antennata, Sauss. Dist. Nat. Transvaal, 1892, p. 217, ♀ ♂, pl. v. fig. 2.

Salix Saussurei, Dalla Torre, Cat. Hym. viii. 1897, p. 240.

Three females, five males, Pretoria (*Distant*); Brak Kloof, near Grahamstown (*Mrs. White*); Fort Johnston, Nyasaland (*Rendall*).

Salius dedjas, Guér.

Pompilus (Pepsis) dedjas, Guér. Lefebv. Voy. Abyss. vi. (1848) pt. 4, p. 355, pl. viii. fig. 2.

One female, Durban (*Distant*).

Salius atropos, Smith.

Mygimnia atropos, Smith, Cat. Hym. Ins. B. M. iii. (1855) p. 186, ♀.

Seven females, six males, Pretoria (*Distant*); Johannesburg (*Cregoe*); Barberton (*Rendall*).

Salius regina, Sauss.

Mygimnia regina, Sauss. Grandidier, Hist. Madagasc. xx. 1 (1892), p. 412, footnote.

Three females, Fort Johnston (*Rendall*).

[To be continued.]

LIX.—*Rhynchotal Notes*.—XIII. Heteroptera: *Families Tingididæ, Phymatidæ, and Aradidæ*. By W. L. DISTANT.

WALKER'S enumeration of these families is to be found in his Cat. Heteroptera, vol. vi. pp. 170–197 and vol. vii. pp. 1–41. I have examined all Walker's types which are still to be found, a few, as usual, being missing and probably placed as synonyms of other species by Walker himself, without any published comment. Some new genera and species are also described from various zoological regions.

Fam. Tingididæ.

Genus CANTACADER.

Cantacader uniformis, sp. n.

Brownish ochraceous; eyes piceous; base of pronotum, an irregular central transverse fascia to hemelytra, continued along inner margin of same to apex, fuscous brown.

Shape and form of *C. quinquecostatus*, Fieb., from which it differs by the two outer continuous carinæ of the pronotum being nearly straight, not convexly curved; a pale line on each side of claval apex, from which the adjacent discal vein is almost entirely black.

Long. 5 millim.

Hab. North India (Brit. Mus.).